CLAIMS

What is claimed is:

1. A database management system for managing data in a
    database, comprising:

5   a query optimizer for selecting an executable procedure
    from a plurality of procedures that operate on data in a
    database, wherein said query optimizer automatically
    generates a statistic derived from the data that is
    operated upon by one of the plurality of procedures, and
10   selects the executable procedure from the plurality of
    procedures based on said statistic.

2. The database management system of claim 1, wherein
    the data is organized in tables formed from columns
    and rows and said statistic is automatically
15   generated for a selected column.

3. The database management system of claim 1, wherein
    said query optimizer determines if said selected
    column is of a type for which a statistic can be
    generated and if so generates a statistic.

4.   A database management system for managing data in a
     database, comprising:

a query optimizer for selecting an executable procedure

from a plurality of procedures that operate on data in a

5   database, wherein said query optimizer identifies that a

statistic does not exist for data that is operated upon

by one of the plurality of procedures; automatically

generates said statistic; and selects the executable

procedure from the plurality of procedures based on said

10   statistic.

5.   A database management system for managing data in a
     database, comprising:

a query optimizer for selecting an executable procedure

from a plurality of procedures that operate on data in a

15   database, wherein said query optimizer automatically

generates a statistic derived from the data that is

operated upon by one of the plurality of procedures;

selects the executable procedure from the plurality of

procedures based on said statistic; and automatically

20   removes said statistic if said statistic is frequently

updated.

6.   A database management system for managing data in a

     database, comprising:

a query optimizer for selecting an executable procedure

from a plurality of procedures that operate on data in a

database, wherein said query optimizer automatically

generates a statistic derived from the data that is

operated upon by one of the plurality of procedures;

generates a statistic update counter for said statistic;

selects the executable procedure from the plurality of

procedures based on said statistic; increments said

statistic update counter when said statistic is updated;

and automatically removes said statistic if said

statistic update counter breaches a threshold value.

7.   The database management system of claim 6, wherein

     said threshold value is a constant.

8.   The database management system of claim 6, wherein

     said threshold value is a function of the data.

9.   The database management system of claim 5, wherein

     the data is organized in tables formed from columns

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and rows and said statistic is generated for a selected column.

10. A computer having stored in memory computer-executable instructions for operating a query optimizer for selecting an executable procedure from a plurality of procedures that operate on data in a database, wherein said query optimizer automatically generates a statistic derived from data that is operated upon by one of a plurality of procedures; generates a statistic update counter for said statistic; selects the executable procedure from the plurality of procedures based on said statistic; increments said statistic update counter when said statistic is updated; and automatically removes said statistic if said statistic update counter breaches a threshold.

11. A database management system for managing data in a database, comprising:

computer-readable instructions for generating a plurality of procedures that operate on data in a database;

computer-readable instructions for automatically generating a statistic derived from the data that is operated upon by one of the plurality of procedures; and

computer-readable instructions for selecting an executable procedure from the plurality of procedures based on said statistic.

12. A database management system for managing data in a database, comprising:

computer-readable instructions for generating a plurality of procedures that operate on data in a database;

computer-readable instructions for automatically generating a statistic derived from the data that is operated upon by one of the plurality of procedures;

computer-readable instructions for generating a statistic update counter for said statistic;

computer-readable instructions for selecting the executable procedure from the plurality of procedures based on said statistic;

computer-readable instructions for incrementing said statistic update counter when said statistic is updated; and

computer-readable instructions for automatically removing said statistic if said statistic update counter breaches a threshold.

13. A method for selecting an executable procedure from a plurality of procedures that operate on data in a database, comprising the steps of:

a) automatically generating a statistic derived from data that is operated upon by one of the plurality of procedures; and

b) selecting the executable procedure from the plurality of procedures based on said statistic.

14. A method for selecting an executable procedure from a plurality of procedures that operate on data in a database, comprising the steps of:

a) determining that a statistic does not exist for data operated upon by at least one of a plurality of procedures;

b) generating said statistics;

c) selecting one of said plurality of procedures using said statistic.

15. A computer-readable media having stored thereon computer-executable instructions for performing the steps recited in claim 14.

16. A method for avoiding the accumulation of statistics in a database wherein statistics are automatically generated, comprising the following steps:

a) creating a statistics update counter for an automatically created statistic;

b) incrementing said counter when said statistic is updated; and

c) removing said automatically created statistic when said counter breaches a threshold value.

17. A computer-readable media having stored thereon computer-executable instructions for performing the steps recited in claim 16.

18. A method for automatically generating statistics for data in a database, comprising the following steps:

a) determining if automatic creation of statistics has been authorized in the database;

b) if automatic creation of statistics has not

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been authorized in the database, forming a guess as to

the statistics;

c) if automatic creation of statistics has been

authorized in the database, determining if the data is of

5   a type for which statistics can be generated in the

database;

d) if the data is of a type for which

statistics can be generated in the database, generating

the statistics; and

10   e) if the data is of a type for which

statistics can not be generated in the database, forming

a guess as to the statistics.

19.   A computer-readable media having stored thereon

computer-executable instructions for performing the steps

15   recited in claim 18.